EUROPEAN CONSTRUCTION EQUIPMENT MARKETS:
A REVIEW OF 2007 AND A FORECAST TO 2012

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OVERVIEW

Table 1. Western Europe: Sales of Construction Equipment by Country, 2004-2007

(Units)

	2004	2005	2006	2007	% Change 2006-2007	% of Total 2007
Austria	2,712	2,562	3,306	3,172	-4	1
Belgium	3,303	3,832	4,395	5,247	+19	2
Denmark	3,200	4,181	5,633	5,947	+6	3
Finland	1,868	2,137	2,232	2,537	+14	1
France	27,797	30,957	33,309	38,732	+16	18
Germany	23,180	24,602	31,853	37,711	+18	18
Ireland	3,431	4,137	4,828	5,200	+8	2
Italy	28,730	28,912	30,650	30,945	+1	15
Netherlands	3,708	4,485	5,729	6,652	+16	3
Norway	2,729	3,232	3,854	4,262	+11	2
Portugal	2,756	2,787	2,710	3,436	+27	2
Spain	14,987	17,073	19,847	21,047	+6	10
Sweden	2,433	2,845	3,191	3,586	+12	2
Switzerland	2,796	3,029	3,534	3,683	+4	2
United Kingdom	28,896	30,196	33,312	39,403	+18	19
Total	**152,526**	**164,967**	**188,383**	**211,560**	**+12**	**100**
% Annual Change	**+11**	**+8**	**+14**	**+12**	**+12**	**-**

Note: Products included in the above are itemised in Table 13

Source: Off-Highway Research

Following the record number of machines sold in 2006, the construction equipment market in Western Europe grew by a further 12 per cent in 2007 to more than 210,000 units. This is the highest number of machines ever retailed, and is likely to represent the peak of demand for at least the next five years. Any decline is not expected to be serious; instead it is expected to represent a return to more normal levels of demand.

The growth in demand in the last decade has been little short of spectacular. Back in 1998, total sales were nearly 121,000 units. They surged quickly to 152,000 by 2000 and there was another surge again in the period from 2003 to 2006, the latter year reaching 188,000 units. The burst of growth during 2007 was not a total surprise to the majority of manufacturers and industry observers, since all knew of big order backlogs at the beginning of the year. The supply of new construction equipment struggled to meet demand, especially in the first half of the year.

Significantly, every West European country has exhibited growth since 2004, although the Austrian market was unique in posting a decline in 2007 compared to the previous year. In the main volume markets, the increase in demand since 2004 has been remarkable: Germany up by 63 per cent, France and Spain by 40 per cent and the UK by 36 per cent. In some of the smaller European markets the growth in percentage terms has been astonishing: Denmark up by 86 per cent, Netherlands by 79 per cent and Sweden by 47 per cent.

There are a number of reasons behind this growth, and although it is quite impossible to summarise all of the influences across such a diverse region, the key drivers behind demand include the following:

- **Growth in Rental:** Rental is growing in importance in almost every country, and not just the traditional markets of the UK and France. All operators wanted to open new branches and add machines in 2007. They clearly expect to account for a significant proportion of machine usage in the future.

- **Low Inflation and Interest Rates:** Low inflation has meant lower interest rates, which makes borrowing a very attractive way of financing the purchase of new equipment and in turn boosts business confidence. There is no evidence of the American credit crunch having affected business in 2007.

- **Infrastructure Construction:** Many markets have been boosted by a buoyant civil engineering sector, creating a large increase in sales of heavy construction equipment to private contractors and in some countries to rental companies.

- **Business Confidence:** Governments are investing consistently if not dramatically in construction projects in this region. To participate in their completion through purchasing new equipment seems to be a relatively low risk exercise, given the current macroeconomic climate and low cost of borrowing. Confidence among such buyers is still strong.

- **Used Equipment Values:** The wave of construction across Africa, Middle East and Central/Eastern Europe has made it easy to realise top prices when selling used construction equipment in the region. Effort is minimal and owners can turn large construction equipment into money in a matter of hours, not even needing to approach a new equipment supplier to do so.

The long term outlook for sales is very good. Whilst it is unlikely that the market can sustain such high levels of demand for long, it is very probable that the average annual level of sales for the period 2008-2012 will be in the order of 180,000 units, well above the historical 10 year average (and 10,000 units more than predicted one year ago).

One word of caution, however, must be raised. In 2007 there was evidence to suggest that machine operators were placing orders because lead times were lengthening. In some regions there are now signs of a downturn, as if the early part of 2007 satisfied this demand, in effect pulling forward orders that might have arrived in early 2008 in normal times. Most companies are still running at 95 to 99 per cent occupancy but within six months the picture could be very different.

Sales by Country

As always, the four largest markets in Europe, the UK, France, Germany and Italy continue to dominate regional demand. The region as a whole has been enjoying uninterrupted growth since 2003, and indeed most markets have been growing since 2002. By 2007 the big four accounted for 70 per cent of sales, with Spain adding another 10 per cent. These five countries have a significant impact on total demand.

In 2007 the **United Kingdom** was the largest market, but only just, with sales of 39,403 machines, accounting for 18 per cent of total regional sales. This was the ninth consecutive year of growth, driven by a stable economy and the commitment by the government to invest heavily in transport projects. The plant hirers continue to invest confidently in new equipment.

In **France** construction equipment sales rose by 16 per cent in 2007, led by a charge of the rental industry into small earthmovers, such as mini excavators (23 per cent growth). In total, the number of units sold was the highest ever. Rental fuelled the record beating sales of mini excavators but the biggest surprise was a 26 per cent rise for crawler excavators. The latter had a large element of small ‘midi’ machines this year.

Italy was uneven, a good first half but then disappointment; by product fortunes were similarly varied (see below). Demand was steady at 31,000 units in 2007. Interest in compact machines such as mini excavators and telescopic handlers used in renovation and refurbishment around historic cities was steady but skid-steer loaders fell back and the backhoe loader, long favoured by small contractors, declined again.

Germany continued on its path of recovery in 2007 with a massive rise in sales of 18 per cent, the fifth consecutive year of growth. All the volume product sectors contributed to the increase, led by a 25 per cent growth in sales of the local favourite, low-powered loaders. Business confidence remains high, and the economic outlook appears very positive. The Federal government has exhibited clear direction in its infrastructure funding policy and this has stimulated both contractors' and rental companies' confidence to invest in new machinery.

Spain was bound to turn down soon, with house building being far in excess of normal levels but the market has not broken yet and although some softening was seen in the second half of the year, most sectors were still at very high levels. The public works programme has a momentum of its own and is bound to last into the medium term. Short term worries in other areas are not affecting it.

Table 2. Western Europe: Sales of Construction Equipment by Country, 2002-2007 (% of Total)

	2002	2003	2004	2005	2006	2007
United Kingdom	17	19	19	18	18	19
France	23	20	19	19	18	18
Germany	15	16	15	15	17	18
Italy	17	17	18	18	16	15
Spain	9	10	10	10	10	10
Netherlands	3	2	2	3	3	3
Denmark	2	2	2	2	3	3
Ireland	2	2	2	2	2	2
Belgium	2	2	2	3	2	2
Norway	2	2	2	1	2	2
Switzerland	1	2	2	2	2	2
Sweden	2	2	2	2	2	2
Portugal	2	2	2	3	1	2
Austria	2	2	2	2	2	1
Finland	1	1	1	1	1	1
Total	**100**	**100**	**100**	**100**	**100**	**100**

Source: Off-Highway Research

2007 Versus Long Term Trend

Table 3. Western Europe: 10 Year Average of Sales, 1998-2007

	1998-2007 (Units)	2007 (Units)	2007 vs. 10 Year Average (%)
Austria	2,756	3,172	+15
Belgium	3,911	5,247	+34
Denmark	3,650	5,947	+63
Finland	1,849	2,537	+37
France	28,227	38,732	+37
Germany	27,615	37,711	+37
Ireland	3,308	5,200	+57
Italy	27,468	30,945	+13
Netherlands	4,534	6,652	+47
Norway	2,628	4,262	+62
Portugal	3,469	3,436	-1
Spain	14,462	21,047	+46
Sweden	2,519	3,586	+42
Switzerland	2,903	3,683	+27
United Kingdom	26,159	39,403	+51
Total Europe	**155,458**	**211,560**	**+36**

Source: Off-Highway Research

Table 4. Western Europe: Forecast Sales of Construction Equipment by Country, 2007-2011 (Units)

		Forecast					% Change
	2007	2008	2009	2010	2011	2012	2007-2012
Austria	3,172	3,004	2,738	2,726	2,600	2,621	-17
Belgium	5,247	4,797	4,402	4,247	4,247	4,250	-19
Denmark	5,947	5,955	5,657	5,348	5,307	5,307	-21
Finland	2,537	2,485	2,389	2,295	2,230	2,179	-14
France	38,732	30,580	29,160	29,530	30,860	30,770	-21
Germany	37,711	37,021	33,917	29,350	27,475	27,581	-27
Ireland	5,200	4,962	4,850	4,640	4,527	4,415	-15
Italy	30,945	30,845	30,120	28,325	27,890	27,800	-10
Netherlands	6,652	6,654	6,140	5,819	5,759	5,735	-14
Norway	4,262	3,943	3,706	3,424	3,328	3,244	-24
Portugal	3,436	2,867	3,172	3,372	3,552	3,482	+1
Spain	21,047	17,110	15,715	15,365	16,685	16,705	-21
Sweden	3,586	3,496	3,451	3,034	2,916	2,954	-18
Switzerland	3,683	3,210	2,967	2,846	2,734	2,765	-25
United Kingdom	39,403	37,230	35,645	34,920	33,620	33,595	-15
Total	**211,560**	**194,159**	**184,029**	**175,241**	**173,730**	**173,403**	
% Change	**+12**	**-8**	**-6**	**-6**	**-1**	**-**	**-18**

Source: Off-Highway Research

It is most unlikely that the level of sales achieved in 2007 can be sustained in the future. 2008 will probably see quite a steep fall after the exuberant buying of last year and then demand is likely to decline gradually until it stabilises again in 2011. In no way should this decline be treated with alarm; it does not signify a slump or a crash, it is merely a reflection of the cyclical nature of the industry and is an adjustment to more realistic levels of demand from the very high rates of growth that have been enjoyed recently. One should bear in mind that a 10 year historic average level of sales has been in the order of 155,000 units a year, so put into that context the forecast remains full of promise.

The current population of machines is young and fit enough to cope with the anticipated workload. There is very little reason to believe that there will be any requirement for additions to the existing fleets of equipment, so future sales will depend on the replacement of machines.

Of the ‘big four’ countries, Italy and Germany are likely to show the greatest resilience, almost no change in 2008. France, on the other hand is vulnerable to rental finding it has a surplus of nearly new machines, especially mini excavators. In summary, if Europe can enjoy a ‘soft landing’ at an average level of 170,000-175,000 units per year after 2008, the industry should be both grateful and prosperous.

Central Europe and Russia

The International Database Service focuses on detailed data on Western Europe. The region of Europe is changing in its definition and as new members join the European Union, they are gaining access to funds for the rebuilding of their broken infrastructure. This, and the rise of the new energy powerhouse of Russia, has caused a new construction equipment market to arise, that of Central and Eastern Europe. The geographical limits can be variable but all suppliers see fast growing markets in some of those countries. In broad terms the region was about one-fifth the size of the West of Europe in 2007 in terms of unit sales.

Russia leads, with sales of around 13,000 units of Western machines in 2007; Poland is the other major market, with about 6,500 machines. Many countries show a preference for new Western machines, as opposed to buying exported used machines. Five countries had markets for Western products of 1,500 to 2,500 units in 2007 – Bulgaria, Romania, Hungary, Czech Republic and, on the Baltic, Lithuania. This puts them on a par with some of the smaller Scandinavian countries, at least in past times when business was bad. It is far from bad in these ‘new’ areas now.

COUNTRY REVIEW

Austria: In line with suppliers' forecasts at the beginning of the year, the Austrian market posted a moderate decline in 2007, following a rise in sales of 22 per cent in 2006. In such a small market, the fall in sales was minimal in terms of units and Austria continues to retain its propensity for stability.

In the context of a recovering economy, construction activity in Austria has expanded with the main growth stimulus in recent years coming from the improvement of the road and rail infrastructure towards the country's eastern neighbours. Civil engineering is set to be the strongest component of the construction industry, with heavy earthmoving equipment featuring in several big projects. The population of machines is considered sufficient to meet current work load requirements, however, and demand over the next two years is likely to contract somewhat, albeit within the context of a traditionally small and stable market.

Belgium: Demand reached unprecedented levels last year, with sales up by 19 per cent at almost 5,300 units, even if manufacturers were unable to deliver all the orders received. 2008 has started on a very positive note, with unfulfilled orders from last year. The market is still very strong, but will slow down throughout the year, and the second half should be considerably down on 2007. Even though demand is slackening, sales are nevertheless at their second highest level on record.

The growth is led principally by mini excavators, with strong demand also being shown for crawler excavators and telescopic handlers. This reflects the large number of small works that exist throughout the country; but also the lack of larger infrastructure works that would have led to stronger demand for large wheeled loaders and dump trucks.

Most dealers for most types of equipment are very positive about the medium term outlook for sales, even though realism dictates that falls of around eight per cent a year during both 2008 and 2009 are indicated.

Denmark: A record year in 2007, with growth of almost six per cent to approximately 6,000 units. The last quarter of the year, however, saw very weak sales as buyers had feared earlier in the year that supply would be difficult, so orders were placed well in advance of when the machines were actually needed.

The rise in sales was largely driven by growth in demand for mini excavators, where sales rose eight per cent to over 2,600 units. A decade ago, sales were fewer than 700 units. It is also interesting to note that in the mid 1990s, combined sales of all machine types were less than the number of mini excavators sold last year.

Strong demand for small to midsized machinery reflects the large number of small projects that are being undertaken. It is expected that in 2008 demand for compact equipment will remain at current levels, before slowly declining from 2009 onwards. The strong economy, allied to a positive outlook amongst contractors, is likely to sustain the buoyant demand and will allow fleet owners to continue with their machine replacement programmes.

Finland: Another record year for construction equipment, with a 12 per cent increase in the level of sales. A strong economy and increased expenditure on construction, particularly in maintenance and residential building in the south, all helped contractors to continue to spend money on new equipment for upgrading their fleets.

The main areas of growth were asphalt finishers (42 per cent), mini excavators (36 per cent), skid-steer loaders (12 per cent) and crawler excavators (10 per cent), but wheeled excavators and backhoe loaders were down six and seven per cent respectively.

The short term outlook is for a slight decline in 2008 and a further three per cent in 2009, but demand is likely to continue at historically high levels.

France: Public works activity registered an impressive real growth rate of 7.5 per cent in 2007 (local spending before the 2008 elections, national spending on the transport infrastructure) and housing was healthy, although starts of about 420,000 units were the same as 2006. Contractors were very happy but especially the rental sector reacted well. The greater volume of work for their clients undoubtedly spurred the rental companies to increase their purchases of compact construction equipment, as their turnovers grew by 7-8 per cent during the year.

Construction equipment sales rose by 16 per cent in 2007, but mini excavators by themselves account for 30 per cent of the units and they were over the peak in 2007. In total, the number of units sold was the highest ever by a very small margin, just above the record year of 2000. Rental has fuelled the sales of mini excavators and the firmness in skid-steer and small articulated loaders. It was contractors, however, that drove upwards the sales of all types of standard excavators. Sales of the larger wheeled loaders for materials producers were very healthy, in spite of delivery delays caused by the tyre shortage. Telescopic handlers did well in farming, which created 45 per cent of sales but overall they declined.

2008 might conceivably be better in the volume of public works, but there was no growth in new orders in 2007 and a question mark remains over the housing boom, which may founder as the public sector runs out of funds for new social housing projects; the private sector buyers rebel against rising property prices and everybody worries about credit. There is a danger of rental rates for construction equipment falling in view of the very heavy purchase of certain machines in recent times.

Germany: The market continued on its path of recovery in 2007 with a further rise in sales of 18 per cent, the fifth consecutive year of growth. All the volume product sectors contributed to the rise, with significant percentage gains being made by crawler excavators and compact wheeled loaders; even the beleaguered backhoe loader sector saw sales recover to a more respectable level. Indeed, skid-steer loaders were the only product to post a decline in sales. Demand for heavy earthmoving equipment was once again extremely buoyant and sales of articulated dump trucks, crawler dozers, asphalt finishers and large wheeled loaders reached their highest level for several years.

Whilst the extent of the growth in 2006 (29 per cent) had surprised many suppliers, their predictions for 2007 proved extremely accurate. The current cycle of demand should, however, be viewed within the context of previous years' sales volumes which, despite the recovery in recent years, have still lagged significantly behind what might be considered a normal level. Nevertheless, business confidence remains high, and the economic outlook appears very positive. The Federal government has exhibited clear direction in its infrastructure funding policy and this has stimulated both contractors' and rental companies' confidence to invest in new machinery. In addition, growth in Eastern European markets has created a high demand for used equipment, persuading contractors to buy new machines.

Suppliers are confident that moderate growth in the market for standard size equipment, particularly wheeled excavators, can be sustained into 2008, although many feel that demand for compact equipment will decline by up to five per cent. As in past years, however, much will depend on the replenishment of rental fleets by the large operators.

Ireland: Sales were at a record level in 2007, and double the volumes sold at the beginning of the decade. The strong agricultural economy and a big infrastructure investment programme started a few years ago have ensured that demand for new equipment remains high. An example is the very strong demand for articulated dump trucks, almost 200 machines in 2007.

Again, the most popular machines are mini excavators, and small to medium sized crawler excavators. One surprising feature of the market was the recovery in demand for backhoe loaders, with sales growing by 20 per cent after five years of steady decline. This doubtless reflects the large number of housing and industrial sites under construction, benefiting the small builder and his favourite machine.

The economy remains strong and investment in infrastructure programmes continues. The agricultural sector is more volatile, and after an excellent couple of years is expected to cool slightly which will reduce the total level of sales. However, the market overall, small though it is, remains strong and is far ahead of where it was at the beginning of this decade. The outlook is positive, with medium term sales likely to remain at or slightly below the level that was enjoyed in 2007.

Italy: Last year the Italian market defied all predictions and reached a record level of just under 31,000 units, one per cent above the previous peak in 2006. As far as product types are concerned, growth was strongest in articulated dump trucks (49 per cent), crawler dozers (25 per cent) and wheeled loaders (eight per cent). The products in decline were skid-steer loaders, down nine per cent, backhoe loaders, down four per cent and telescopic handlers, down three per cent.

The short term outlook for the Italian market is rather pessimistic. The problems are budget cutbacks and the suspension of new projects in the public sector, coupled with the large population of nearly new machines that is doubtless adequate to cope with the anticipated workload. Demand for construction equipment is forecast to be stable in 2008, and a gradual decline to 27,800 units is forecast by 2012.

Netherlands: This is often seen as one of the more stable markets in Europe, and so when it enjoys a 16 per cent rise in sales in a single year, as it did in 2007, it is evident that something special had happened. The growth in sales was largely fuelled by huge increase in demand for mini excavators, with sales rising by 32 per cent to over 2,600 machines in 2007. Five years ago demand for this product struggled to reach 1,000 units a year.

A note of caution should be used when a closer examination of market trends is being made, for there are a number of rental companies based in the country that buy all their requirements in the

Netherlands for their international operations. Examples include Boels, which purchases machines here for use in Belgium, Germany and France. Similarly, Riwal purchases telescopic handlers in the Netherlands for its depots in Denmark and Norway. In addition, Dutch contractors have been very active in the Middle East and South America over the last twelve months, and they have bought machines in Holland from local dealers and shipped them to their final destinations. So the growth in the Netherlands should perhaps be seen as the healthy state of international demand as a whole, and not just a reflection of prosperous times at home.

The market is likely to continue its strength in 2008, as there is a significant order backlog of orders that has yet to be fulfilled. The second half of the year is expected to see a slowdown in demand for new machines, but sales will remain at very high levels for the next few years.

Norway: In 2007 the Norwegian economy continued to show remarkable strength which has benefited both the construction and construction equipment industries. Overall sales increased by a healthy nine per cent on the previous year, and for the first time exceeded 4,200 units. Telescopic handlers, mini excavators and crawler excavators were the major growth sectors of 2007, with sales increasing 23, 16 and 10 per cent respectively over 2006.

2007 was probably the peak year in the current purchasing cycles. The outlook for the next two years is for a slight decline, about five per cent overall, affecting primarily road building machinery and heavy equipment, with very little change in any of the other product sectors.

Portugal: The market increased by 700 units, after five consecutive bad years but the positive tendency was not obvious, as much of the numerical increase came from one large purchase of machines for a new rental company at the end of the year. It was another bad year for the construction industry, dragged down by the crisis of the housebuilding sector (negative income trends for buyers and elevated interest rates) and the collapse of new public spending. Building decreased by two per cent and public works by six per cent during the year.

Construction equipment sales were up in some sectors, notably in backhoe loaders, which ended six years of decline; and three compact machines affected by the rental order – mini excavators, skid-steer loaders and telescopic handlers. In 2008 and 2009 building construction should resume some modest growth but civil engineering will still be in decline. The outlook is weak, with morale sapped by the economic crisis and the government highly likely to use public works projects to trim its budgets and get back in line with the rules of the euro club. Most suppliers recently interviewed expect no change before 2009, or even 2010.

Spain: Construction has been the motor of economic growth in Spain for the last six years but in one well known area conditions have changed in 2007. Housing has come to the end of a golden period, when interest rates, foreign purchases of property on the coasts, and investment moving away from the stock market all combined to create a mania for new homes, with nearly 800,000 houses started yearly in 2006 and 2007. The cracks appeared in the spring, as property companies went under but for construction equipment the effect was not felt until after the summer holidays.

In consequence, even the figures for compact machines, linked to house building, are not too bad at all, although skid-steer loaders and mini excavators were weaker in the second half. Certainly in large machines, most people thought the market must cool off in 2007 but that did not happen. The huge programmes of public works associated with the Infrastructure Plan are underwriting strong sales of crawler excavators (a third up on 2006), large crawler dozers (50 per cent up), high capacity wheeled loaders, especially around 200 horsepower and articulated dump trucks. The best dump truck sector was the 36 tonne size, the biggest selling crawler excavator category was 33-35 tonnes. This is a market that is calling for big machines at the moment.

In 2007 total sales were an all-time record, the thirteenth consecutive year of growth. It must also be the last in that blessed line. For 2008, vulnerable products are those linked to house building; public works seem better placed, with the government committed to spending on the infrastructure, both new and existing. A general election in March does not really threaten the big projects, which can hardly be stopped in mid-course. The construction equipment sales forecast is conservative, indicating a decrease of eight per cent.

Sweden: Yet another good year for sales in 2007, the best year since 1990 and 11 per cent better than 2006. A strong investment programme in works for maintenance works and new infrastructure, particularly environmental projects, benefited sales of mini excavators (up 25 per cent), crawler excavators (up 20 per cent) and wheeled excavators (up 12 per cent). Other products which also did well were wheeled loaders, backhoe loaders and telescopic handlers.

Prospects for 2008 are not very clear at the moment, because although construction and maintenance contracts may increase, there is enough equipment available to cope with the workload. On balance, most suppliers expect two years of mild recession, as has often been seen in previous cycles of the Swedish economy.

Switzerland: This traditionally stable market rose by some four per cent following an impressive rise of 16 per cent in 2006. This growth was largely attributable to gains in the crawler excavator and mini excavator sectors, although there were also further increases in demand for crawler dozers and wheeled loaders. Significantly, wheeled excavators posted a decline following two years of buoyant sales.

Despite several years of gloom surrounding the construction sector, building activity has been growing since 2002 and construction equipment demand has picked up. Increases in civil engineering output, most notably the NEAT (New Transalpine Rail Link) alpine tunnel projects, which are scheduled to last until 2014, and a buoyant residential housing market, have all contributed to the current healthy level of sales of new construction equipment. Suppliers nevertheless believe the increase in 2007 will be offset by a decline of approximately 13 per cent in 2008 as the market returns once more to its customary level of stability.

United Kingdom: Now the largest market in Europe in terms of unit sales, the country enjoyed another bountiful year in 2007. Sales grew 18 per cent to set another record at just under 39,500 machines. Articulated dump trucks, crawler excavators, mini excavators and telescopic handlers are at record levels. This is largely fuelled by the large number of infrastructure projects, of all sizes, that are underway in all parts of the country. In particular, the Olympic Games due to be held in London in 2012, and the Commonwealth Games in Glasgow in 2014, will both call for large volumes of machines of all types.

The increased worldwide demand for construction equipment, particularly for good second hand machines, has seen many hire companies replenish their fleets earlier than expected, by selling machines after 12-18 months and replacing them with new machines. The increase in commodity prices has given a boost to the agricultural sector, and as a result a surge in new orders of telescopic handlers to this sector was reported in 2007.

The outlook remains very positive for the UK, although future sales will doubtless decline from the peak that was enjoyed in 2007. Any decline, however, is expected to be a return to more normal levels of demand, rather than a fall of any significance.

Table 5. Western Europe: Sales of Construction Equipment, 2007-2009

(Units)

	Austria			Belgium		
	2007	**2008***	**2009***	**2007**	**2008***	**2009***
Articulated Dump Trucks	**56**	45	35	**102**	85	75
Asphalt Finishers	**52**	45	45	**25**	15	15
Backhoe Loaders	**121**	110	100	**96**	85	75
Crawler Dozers	**24**	28	20	**66**	50	40
Crawler Excavators	**983**	950	850	**1,100**	950	900
Crawler Loaders	**9**	10	10	**2**	2	2
Mini Excavators	**720**	700	650	**1,625**	1,500	1,350
Motor Graders	**29**	18	18	**6**	5	5
Motor Scrapers	**-**	-	-	**-**	-	-
Rigid Dump Trucks	**9**	8	10	**15**	15	15
RTLTs – Masted	**50**	50	40	**45**	25	25
RTLTs – Telescopic	**88**	100	100	**875**	825	750
Skid-Steer Loaders	**133**	115	130	**365**	350	350
Wheeled Excavators	**247**	225	230	**350**	330	300
Wheeled Loaders < 80 hp	**166**	150	125	**145**	145	125
Wheeled Loaders > 80 hp	**485**	450	375	**430**	415	375
Total	**3,172**	**3,004**	**2,738**	**5,247**	**4,797**	**4,402**
% Annual Change	**-4**	**-5**	**-9**	**+19**	**-8**	**-8**

* Forecast
Source: Off-Highway Research

Table 6. Western Europe: Sales of Construction Equipment, 2007-2009

(Units)

	Denmark			Finland		
	2007	**2008***	**2009***	**2007**	**2008***	**2009***
Articulated Dump Trucks	**53**	50	45	**31**	28	20
Asphalt Finishers	**17**	17	15	**30**	26	20
Backhoe Loaders	**627**	575	525	**111**	115	120
Crawler Dozers	**57**	45	40	**4**	3	4
Crawler Excavators	**585**	575	550	**820**	810	780
Crawler Loaders	-	1	1	**1**	1	-
Mini Excavators	**2,650**	2,750	2,700	**472**	455	440
Motor Graders	**1**	2	1	**8**	10	6
Motor Scrapers	-	-	-	-	-	-
Rigid Dump Trucks	-	-	-	**5**	2	4
RTLTs – Masted	**17**	15	15	-	-	-
RTLTs – Telescopic	**640**	650	600	**153**	155	150
Skid-Steer Loaders	**145**	140	130	**155**	150	140
Wheeled Excavators	**40**	35	35	**139**	145	140
Wheeled Loaders < 80 hp	**680**	675	600	**219**	185	175
Wheeled Loaders > 80 hp	**435**	425	400	**389**	400	390
Total	**5,947**	**5,955**	**5,657**	**2,537**	**2,485**	**2,389**
% Annual Change	**+6**	**-**	**-5**	**+14**	**-2**	**-4**

* Forecast
Source: Off-Highway Research

Table 7. Western Europe: Sales of Construction Equipment, 2007-2009

(Units)

	France			Germany		
	2007	2008*	2009*	2007	2008*	2009*
Articulated Dump Trucks	596	400	400	490	500	450
Asphalt Finishers	225	200	150	363	350	300
Backhoe Loaders	2,850	2,500	2,300	144	135	120
Crawler Dozers	293	180	200	560	525	450
Crawler Excavators	4,920	3,500	3,000	4,895	5,050	4,500
Crawler Loaders	159	100	100	41	40	30
Mini Excavators	12,630	8,500	8,500	12,692	11,900	11,000
Motor Graders	130	120	120	106	100	85
Motor Scrapers	-	-	-	-	1	2
Rigid Dump Trucks	59	80	90	99	90	80
RTLTs – Masted	540	400	300	200	190	200
RTLTs – Telescopic	8,843	8,100	8,500	2,498	2,600	2,500
Skid-Steer Loaders	1,826	1,400	1,400	780	740	700
Wheeled Excavators	2,200	2,000	1,600	3,897	4,150	3,700
Wheeled Loaders < 80 hp	1,930	1,700	1,200	7,383	7,000	6,500
Wheeled Loaders > 80 hp	1,531	1,400	1,300	3,563	3,650	3,300
Total	38,732	30,580	29,160	37,711	37,021	33,917
% Annual Change	+16	-21	-5	+18	-2	-8

* Forecast
Source: Off-Highway Research

Table 8. Western Europe: Sales of Construction Equipment, 2007-2009

(Units)

	Ireland			Italy		
	2007	2008*	2009*	2007	2008*	2009*
Articulated Dump Trucks	194	190	180	113	105	100
Asphalt Finishers	45	45	40	280	280	250
Backhoe Loaders	300	290	275	1,454	1,400	1,350
Crawler Dozers	60	55	50	151	140	130
Crawler Excavators	1,425	1,400	1,350	4,840	4,900	4,800
Crawler Loaders	-	-	-	75	70	60
Mini Excavators	1,685	1,500	1,400	14,281	14,100	14,000
Motor Graders	-	2	-	13	15	20
Motor Scrapers	-	-	-	-	-	-
Rigid Dump Trucks	4	5	5	43	45	40
RTLTs – Masted	29	25	20	95	90	100
RTLTs – Telescopic	900	900	1,000	2,471	2,500	2,400
Skid-Steer Loaders	170	160	150	4,332	4,350	4,150
Wheeled Excavators	95	90	80	435	420	420
Wheeled Loaders < 80 hp	18	25	25	426	430	400
Wheeled Loaders > 80 hp	275	275	275	1,936	2,000	1,900
Total	5,200	4,962	4,850	30,945	30,845	30,120
% Annual Change	+8	-6	-2	+1	-	-2

* Forecast
Source: Off-Highway Research

Table 9. Western Europe: Sales of Construction Equipment, 2007-2009

(Units)

	Netherlands			Norway		
	2007	2008*	2009*	2007	2008*	2009*
Articulated Dump Trucks	40	40	35	99	95	90
Asphalt Finishers	50	45	35	52	40	30
Backhoe Loaders	29	15	15	13	10	15
Crawler Dozers	34	30	30	23	20	15
Crawler Excavators	950	950	900	1,797	1,630	1,550
Crawler Loaders	1	-	1	3	1	1
Mini Excavators	2,610	2,750	2,500	1,105	1,050	1,020
Motor Graders	5	4	4	16	15	10
Motor Scrapers	-	-	-	-	-	-
Rigid Dump Trucks	2	-	-	6	10	8
RTLTs – Masted	81	20	20	2	2	2
RTLTs – Telescopic	775	750	700	129	115	100
Skid-Steer Loaders	230	225	200	113	110	100
Wheeled Excavators	975	950	900	190	190	165
Wheeled Loaders < 80 hp	235	225	200	170	160	140
Wheeled Loaders > 80 hp	635	650	600	489	495	460
Total	6,652	6,654	6,140	4,262	3,943	3,706
% Annual Change	+16	-	-8	+11	-5	-6

* Forecast
Source: Off-Highway Research

Table 10. Western Europe: Sales of Construction Equipment, 2007-2009

(Units)

	Portugal			Spain		
	2007	2008*	2009*	2007	2008*	2009*
Articulated Dump Trucks	84	60	60	258	220	200
Asphalt Finishers	37	15	20	155	150	150
Backhoe Loaders	1,100	950	950	4,200	3,500	3,300
Crawler Dozers	40	45	40	214	160	120
Crawler Excavators	484	450	470	2,500	2,200	1,700
Crawler Loaders	-	2	2	19	10	5
Mini Excavators	413	330	350	2,650	2,100	2,300
Motor Graders	47	25	35	122	90	80
Motor Scrapers	-	-	-	-	-	-
Rigid Dump Trucks	9	10	10	217	180	150
RTLTs – Masted	33	15	15	1,200	800	800
RTLTs – Telescopic	520	350	370	3,480	2,250	2,500
Skid-Steer Loaders	340	350	480	3,041	2,800	2,000
Wheeled Excavators	122	100	150	1,300	1,100	900
Wheeled Loaders < 80 hp	22	10	10	181	100	110
Wheeled Loaders > 80 hp	185	155	210	1,510	1,450	1,400
Total	3,436	2,867	3,172	21,047	17,110	15,715
% Annual Change	+27	-17	+11	+6	-19	-8

* Forecast
Source: Off-Highway Research

Table 11. Western Europe: Sales of Construction Equipment, 2007-2009

(Units)

	Sweden			Switzerland		
	2007	2008*	2009*	2007	2008*	2009*
Articulated Dump Trucks	**51**	50	45	26	25	25
Asphalt Finishers	**37**	40	35	30	30	32
Backhoe Loaders	**248**	255	245	2	-	2
Crawler Dozers	**14**	12	10	40	30	20
Crawler Excavators	**745**	740	700	853	775	650
Crawler Loaders	-	3	2	34	22	20
Mini Excavators	**823**	820	900	1,727	1,400	1,300
Motor Graders	**12**	12	10	1	1	1
Motor Scrapers	-	-	-	-	-	-
Rigid Dump Trucks	**2**	7	4	3	2	2
RTLTs – Masted	-	2	-	30	20	15
RTLTs Telescopic	**110**	110	120	88	100	110
Skid-Steer Loaders	**153**	145	130	132	140	130
Wheeled Excavators	**395**	390	360	246	250	275
Wheeled Loaders < 80 hp	**190**	180	170	225	200	175
Wheeled Loaders > 80 hp	**766**	730	720	246	215	210
Total	**3,586**	**3,496**	**3,451**	**3,683**	**3,210**	**2,967**
% Annual Change	**+12**	**-3**	**-1**	**+4**	**-13**	**-8**

* Forecast
Source: Off-Highway Research

Table 12. Western Europe: Sales of Construction Equipment, 2007-2009

(Units)

	United Kingdom		
	2007	2008*	2009*
Articulated Dump Trucks	**870**	850	825
Asphalt Finishers	**146**	150	150
Backhoe Loaders	**2,450**	2,400	2,400
Crawler Dozers	**335**	300	300
Crawler Excavators	**8,800**	6,900	6,500
Crawler Loaders	**42**	40	35
Mini Excavators	**14,700**	14,500	14,000
Motor Graders	-	5	5
Motor Scrapers	**5**	5	5
Rigid Dump Trucks	**80**	80	75
RTLTs – Masted	**475**	450	350
RTLTs – Telescopic	**8,750**	9,000	8,500
Skid-Steer Loaders	**940**	900	850
Wheeled Excavators	**520**	500	500
Wheeled Loaders < 80 hp	**135**	150	150
Wheeled Loaders > 80 hp	**1,155**	1,000	1,000
Total	**39,403**	**37,230**	**35,645**
% Annual Change	**+18**	**-5**	**-4**

* Forecast
Source: Off-Highway Research

EQUIPMENT REVIEW

It is important to remember that there are major differences in machine preferences between countries. One country might favour backhoe loaders over wheeled excavators or wheeled loaders, while in another telescopic handlers might not have not become accepted as being a popular part of a rental company's fleet. Regional machine preferences, coupled with the economic fortunes of individual countries, therefore combine to influence regional demand for particular equipment types.

In 2007, two thirds of the product sectors enjoyed double digit growth. Mini excavator demand continued unabated, and with growth of 13 per cent sales topped 70,000 units, a remarkable increase of 70 per cent in just four years. Other compact equipment fared well, in particular small wheeled loaders, sales of which rose by 21 per cent, largely as a result of the sustained recovery in Germany.

Table 13. Western Europe: Sales of Construction Equipment by Type, 2004-2007 (Units)

	2004	2005	2006	2007	% Change 2006-2007	% of Total 2007
Articulated Dump Trucks	1,883	1,985	2,521	3,063	+21	1
Asphalt Finishers	1,222	1,279	1,369	1,544	+13	1
Backhoe Loaders	13,156	12,544	12,673	13,745	+8	6
Crawler Dozers	1,230	1,261	1,482	1,915	+29	1
Crawler Excavators	22,833	25,345	29,799	35,697	+21	17
Crawler Loaders	297	292	344	386	+13	-
Mini Excavators	47,602	52,659	62,594	70,878	+13	34
Motor Graders	470	407	414	496	+20	-
Motor Scrapers	6	6	5	5	-	-
Rigid Dump Trucks	475	623	516	553	+7	-
RTLTs – Masted	2,036	2,147	2,234	2,797	+25	1
RTLTs – Telescopic	23,116	26,307	28,271	30,320	+7	14
Skid-Steer Loaders	11,320	11,582	13,164	12,855	-3	6
Wheeled Excavators	8,786	9,165	10,323	11,151	+8	5
Wheeled Loaders	18,094	19,365	22,674	26,155	+15	12
Wheeled Loaders < 80 hp	7,482	8,171	10,040	12,125	+21	6
Wheeled Loaders > 80 hp	10,612	11,194	12,634	14,030	+11	7
Total	**152,526**	**164,967**	**188,383**	**211,560**	**+12**	**100**
% Annual Change	**+11**	**+8**	**+14**	**+12**	**+12**	

Source: Off-Highway Research

Large scale investment in transport and infrastructure projects within the region ensured that demand for heavy earthmoving equipment was also subject to significant gains. Another important consideration was how easy it was for owners to sell used construction equipment abroad and buy a replacement in part with the cash proceeds. Articulated dump truck sales moved ahead a further 21 per cent to their highest level ever, whilst crawler dozers posted an equally impressive increase of 29 per cent. Crawler excavator volumes remain at an all-time high and growth of 21 per cent in 2007 saw sales reach nearly 36,000 units, a testament to the machine's universal acceptance on a wide variety of job sites.

Off-Highway Research forecasts a decline in demand of around 11 per cent during the period 2008-2012. Given the exceptionally high volume of sales in 2007 this is nothing dramatic and nothing to be alarmed about, but it is a decline nevertheless. With the possible exception of the low volume grader sector, all products will probably see a cyclical downturn during that period. It is important to remember, however, that the forecast demand in 2011-2012 is still at a level pitched between 2005, the year in which the third highest number of machines ever was retailed in Western Europe and 2006, and the second best year.

Table 14. Western Europe: Forecast Sales of Construction Equipment by Type, 2008-2012 (Units)

		Forecast					% Change
	2007	2008	2009	2010	2011	2012	2007-2008
Articulated Dump Trucks	3,063	2,743	2,585	2,423	2,278	2,305	-10
Asphalt Finishers	1,544	1,448	1,287	1,119	1,113	1,125	-6
Backhoe Loaders	13,745	12,340	11,792	11,461	11,495	11,225	-10
Crawler Dozers	1,915	1,623	1,469	1,350	1,288	1,304	-15
Crawler Excavators	35,697	31,780	29,200	27,840	25,805	25,680	-12
Crawler Loaders	386	302	269	268	248	259	-12
Mini Excavators	70,878	64,355	62,410	58,650	59,350	58,805	-9
Motor Graders	496	424	400	435	456	470	-15
Motor Scrapers	5	6	7	5	5	6	+20
Rigid Dump Trucks	553	534	493	455	459	467	-3
RTLTs – Masted	2,797	2,104	1,902	1,655	1,658	1,657	-25
RTLTs – Telescopic	30,320	28,505	28,400	28,645	28,625	28,965	-6
Skid-Steer Loaders	12,855	12,075	11,040	10,820	11,275	11,280	-6
Wheeled Excavators	11,151	10,875	9,755	9,205	9,285	9,240	-2
Wheeled Loaders	26,155	25,045	23,020	20,910	20,390	20,615	-4
Wheeled Loaders < 80 hp	12,125	11,335	10,105	9,235	9,235	9,355	-7
Wheeled Loaders > 80 hp	14,030	13,710	12,915	11,675	11,155	11,260	-2
Total	**211,560**	**194,159**	**184,029**	**175,241**	**173,730**	**173,403**	**-8**
% Change	**+12**	**-8**	**-5**	**-5**	**-1**	**-**	

Source: Off-Highway Research

Articulated Dump Trucks: A second consecutive year with a big increase in sales, this time a rise of 21 per cent. The largest market by some margin remains the United Kingdom, where

870 units were sold in 2007, equating to 28 per cent of the region's total sales. France showed a major increase to 596 units and Spain grew again, by over 30 per cent this time.

The future looks quite promising, with the large volumes delivered at the beginning of the decade needing to be replaced in the near future. Sales should remain around an average of 2,500 units a year, with strong demand coming from the UK, Germany and France.

Asphalt Finishers: The market was remarkably firm from 2002 to 2006 but rose by no less than 13 per cent in 2007. Sales growth of 24 per cent in Germany and 17 per cent in France was responsible.

The future continues to look solid, with sales returning to their customary average of 1,100 units by the end of the decade. Demand in the UK is forecast to remain stable, but declines from the abnormally high level seen in 2007 can be expected in all the major markets.

Backhoe Loaders: European sales peaked at around 18,000 units in 1999-2000, and have declined continually since then. Sales in 2007 finally rose by eight per cent, largely due to the last year of the boom in Spain. With sales of 4,200 units in 2007, it is now Europe's largest backhoe loader market and accounts for nearly a third of regional demand. The other main markets have all seen a gradual erosion of demand, although Italy, France and the UK were all stable in 2007.

It appears that the decline in demand has still not been arrested, and it is likely that future European sales will stabilise at an average level of around 11,000 units a year. Bear in mind, however, that Central and Eastern Europe love the machines and bought more than 11,000 of them in 2007.

Crawler Dozers: This mature sector has been buoyant in the last three years, up by 29 per cent to 1,915 units in 2007. The market increase was largely attributable to buoyant demand in Germany, Europe's largest market accounting for 29 per cent of sales, and Spain. The other main markets, Italy, UK and France all posted reasonable increases.

Forecast demand looks very steady indeed, with sales likely to move down gradually to the range of 1,300 units per year.

Crawler Excavators: After several years of growth, there was further increased demand in 2006, with sales growing by 21 per cent to 35,700 units. This reflects the growing popularity of the 8-12 tonne midi excavator in France, UK, Spain and elsewhere. Very strong demand continued to be seen in the UK (the largest market in Europe, with 25 per cent), France and Germany, although Italy proved to be disappointingly modest. Significant advances were made in most of the smaller countries, with particularly firm demand being seen in Nordic countries.

Future demand will likely decline by about 30 per cent over the next five years but even at 25,000 units per year, the market will remain in robust health. Because 2007 was so high, it is difficult to judge how many markets will come back down to past levels but all will decline in the end.

Crawler Loaders: Often thought to be in terminal decline, this product now represents very small volumes indeed. Sales in 2007 at 386 units were a shadow of the 600 units sold as recently as 2001. Only France and Italy, combining to account for 60 per cent of European sales, have any liking for this machine, and future demand is likely stabilise at around 260 machines a year. As such it is unlikely that the crawler loader will ever be regarded as being anything but a niche product, mainly working on land fill.

Mini Excavators: Demand for mini excavators once again defied all forecasts by showing a massive 13 per cent gain in 2007, with sales peaking at nearly 71,000 units, the highest level on record. The largest markets all continued their strong patterns of growth, in particular Germany where sales rose by 15 per cent to 11,000 units and the UK with growth of 15 per cent and 12,800 units sold; Italy was demoted to being the second largest market, with 14,300 units. Demand in the fourth largest market, France, also rose by 23 per cent strongly to 10,350 units. Significantly, there was also substantial growth in the smaller countries, most notably, Netherlands, Denmark, Ireland, Belgium and Switzerland.

Forecasting demand for mini excavators is always difficult, for the market invariably outstrips any forecast that one optimistically makes. Every time a rental company management feels cheerful, it buys mini excavators. Whilst demand in 2008 is likely to fall but remain higher than in 2006, with the recent rash of orders and the large and relatively new population of machines, sales are likely to stabilise at around 58,000 units in the medium-term future. Certainly a downturn, but a relatively modest one as rental companies will want to update their fleets on a very regular basis.

Motor Graders: Sales of motor graders swung upwards in 2007, with almost 500 units retailed in the region. France, Germany and Spain sustain the bulk of demand. Demand in Germany soared uncharacteristically by 65 per cent in 2007.

The future is likely to show only modest cyclical growth and a market of around 425-450 units a year for the foreseeable future is likely.

Rigid Dump Trucks: An unstable market, sales soared to 623 units in 2005, and then reverted to more customary levels in 2006 with sales of 517 units. 2007 was a comeback year, up seven per cent. Spain continued to be the region's largest market, accounting for 39 per cent of total sales, and with 217 sales was far ahead of the next largest market, Germany with 99 units.

The long term forecast hangs on how one sees the possibility of any downturn anticipated in the Spanish market as its public works programme ends. Without it the buyers cannot use (and resell) so many units. It is likely that it will fall to an average of 450 units a year soon.

Rough Terrain Lift Trucks – Masted: Sales have steadied since the fall of the late 1990s. The only market of any importance for this product is Spain, whose huge house building market helps in sustaining demand at around 700 units a year (mostly of only 1.0 tonne capacity).

Although Spain will continue to provide the bulk of sales, most other countries will tend to prefer alternative products, in particular the telescopic handler. Sales will gradually decline to around 1,600 units in the period up to 2012.

Rough Terrain Lift Trucks – Telescopic: Further strong growth was experienced in 2007 following three excellent years in 2004 to 2006. Enormous demand from rental companies, particularly in the UK and France, drove the market up but farming also played its part to push the market to over 30,000 units.

The United Kingdom and France (each 29 per cent of the total) continue to dominate demand, but the Spanish market (11 per cent) has passed its peak and did not grow in 2007.

Future demand will continue to be strong, although there is a realisation that sales in 2007 are likely to represent the peak of the current cycle. Volumes over the next five years are expected to decline moderately and stabilise at around 28,500 units a year for the foreseeable future.

Skid-Steer Loaders: After a healthy 14 per cent growth in 2006 sales turned down in 2007, to below 13,000 units. However, demand is really only sustained by three countries: Italy (34 per cent of total European demand) and Spain (24 per cent) declined, while France (14 per cent) saw demand rise. Some less enthusiastic markets such as the UK experienced growth but most were modestly negative.

Future sales are unlikely to exceed the level attained in 2006 and should decline slightly to around 11,280 units by 2012.

Wheeled Excavators: Sales increased by 8 per cent in 2007 to 11,150 units, the fourth successive year of growth. This improvement is attributable to the sustained recovery in Germany (+16 per cent) and small increases in France and Spain.

The market should increase slightly in 2008 as demand in Germany strengthens once again, although is likely to decline to more sustainable levels of around 9,000 units over the medium to long term.

Wheeled Loaders – Under 80 Horsepower: The market is very largely divided between Germany and France, which together account for 77 per cent of the region's total demand. German sales pushed ahead strongly in 2007 to 7,400 units, while French rental companies continued to invest in renewing their fleets. As a result the market rose by 21 per cent to surpass 12,000 units.

A stable market can be expected in Germany in 2008, accompanied by some softening in France. After that a very modest decline to about 9,000 units a year may be expected.

Wheeled Loaders – Over 80 Horsepower: The market continued to move ahead strongly in 2007, with growth of 11 per cent to 14,000 units. Demand is more evenly spread than for compact wheeled loaders, and there are a wider range of production applications which often help to minimise a downturn in demand. With the exception of Netherlands and Norway, every market in Europe contributed to the rise in volumes. Germany continued to be the most important market, with over 3,500 units in 2007, but Italy, France, UK and Spain all performed strongly.

Demand is forecast to stabilise in 2007, largely as a result of the rise last year. A decline to around 11,000 units a year by the end of the period under review can be expected.

PRODUCTION REVIEW

Table 15. Western Europe: Production of Construction Equipment by Type, 2004-2007

(Units)

	2004	2005	2006	2007	% Change 2006-2007
Articulated Dump Trucks	5,570	6,815	6,820	6,793	-
Asphalt Finishers	2,341	2,420	2,680	3,305	+23
Backhoe Loaders	28,119	29,115	31,697	41,700	+30
Crawler Dozers	1,780	1,760	1,825	2,020	+11
Crawler Excavators	17,813	20,198	23,451	28,513	+22
Crawler Loaders	1,915	1,755	1,812	1,555	+14
Mini Excavators	40,322	38,198	47,082	53,007	+14
Motor Graders	382	376	273	511	+87
Motor Scrapers	14	15	25	25	-
Rigid Dump Trucks	482	448	475	475	-
RTLTs – Masted	2,210	3,335	3,560	3,985	+12
RTLTs – Telescopic	33,355	38,786	41,010	45,532	+11
Skid-Steer Loaders	3,070	3,665	4,000	4,355	+9
Wheeled Excavators	10,813	11,743	11,723	14,004	+19
Wheeled Loaders	26,210	27,858	30,839	37,598	+22
Wheeled Loaders < 80 hp	10,096	10,703	12,358	16,565	+34
Wheeled Loaders > 80 hp	16,114	17,155	18,481	21,033	+14
Total	**174,396**	**186,487**	**207,272**	**243,378**	**+17**
% Annual Change	**+17**	**+7**	**+11**	**+17**	

Source: Off-Highway Research

The growth in European production witnessed in 2007 marked the fifth consecutive year of expansion. The 243,000 units built are an all-time record, driven by demand in all parts of Europe and strong exports – especially to active Middle East and African markets, for which most international suppliers use plants in Europe.

In terms of products, the largest volume is now mini excavators, which posted an increase of 14 per cent to 53,500 units; these were followed by telescopic handlers, which recorded a huge rise in production of 27 per cent. Strong growth was also seen in the output of articulated dump trucks, asphalt finishers, larger excavators and all types of wheeled loader.

Production in the UK increased by 17 per cent, securing its place as Europe's largest manufacturer by a very considerable margin. It is the biggest producer in six products and accounts for one in every three machines made in the region. Germany has overtaken Italy to become the second largest producer with 17 per cent of regional production. In 2007 the gap between the first two and the rest increased as output stagnated in France and fell back in Italy.

Together the 'big four' account for 80 per cent of European production, but it should be noted that smaller countries like Sweden, the Netherlands, Belgium and Austria have all made significant progress in recent years.

Table 16. Western Europe: Production of Construction Equipment by Country, 2004-2007

(Units)

	2004	2005	2006	2007	% Change 2006-2007	% of Total 2007
Austria	6,248	6,436	7,710	9,595	+24	4
Belgium	7,750	8,100	9,720	13,250	+36	6
Denmark	305	500	575	625	+9	-
Finland	433	406	466	504	+8	-
France	23,738	27,035	31,740	32,770	+3	14
Germany	28,969	32,198	33,665	40,151	+19	17
Italy	30,671	32,433	40,673	37,543	-8	16
Netherlands	5,540	6,605	7,405	8,850	+20	4
Norway	120	150	200	200	-	-
Spain	820	1,510	1,730	1,980	+14	1
Sweden	7,283	8,224	8,948	9,993	+12	4
United Kingdom	62,519	62,890	64,440	75,255	+17	33
Total	**174,396**	**186,487**	**207,272**	**230,716**	**+11**	**100**
% Annual Change	**+17**	**+7**	**+11**	**+11**		

Source: Off-Highway Research

INTERNATIONAL PERSPECTIVES

Sales

China: The growth in sales has resumed after the pause of 2004-2005, with increases over 20 per cent in both years since then. Demand for wheeled loaders, which account for two out of every three machines sold, continued unabated, and it is their huge sales volumes that have contributed to another record year in 2007.

The outlook is for more growth across all product sectors, the most significant new trend being the remarkable rise in popularity of mini excavators.

Table 17. Regional Sales of Construction Equipment, 2007-2008

(Units)

	China		North America		Western Europe		Japan		India	
	2007	**2008***	**2007**	**2008***	**2007**	**2008***	**2007**	**2008***	**2007**	**2008***
Articulated Dump Trucks	91	100	3,735	3,000	3,063	2,743	90	90	13	15
Asphalt Finishers	1,027	1,100	2,725	2,300	1,544	1,448	240	250	265	300
Backhoe Loaders	583	800	20,900	18,200	13,745	12,340	4	5	21,761	30,000
Crawler Dozers	5,273	5,400	14,355	12,500	1,915	1,623	1,500	1,500	627	700
Crawler Excavators	49,167	60,000	24,600	21,500	35,697	31,780	33,070	34,700	9,645	14,000
Crawler Loaders	10	10	835	725	386	302	80	70	-	5
Mini Excavators	16,850	22,000	26,500	22,500	70,878	64,355	29,200	27,750	10	25
Motor Graders	1,766	1,850	4,635	4,200	496	424	210	210	544	750
Motor Scrapers	2	3	600	450	5	6	20	20	-	-
Rigid Dump Trucks	687	750	980	900	553	534	180	180	594	725
RTLTs – Masted	-	-	3,375	2,900	2,797	2,104	-	-	-	-
RTLTs – Telescopic	20	20	16,500	14,500	30,320	28,505	2	2	11	50
Skid Steer Loaders	250	300	52,850	46,000	12,855	12,075	1,130	1,100	190	300
Wheeled Excavators	806	1,000	870	800	11,151	10,875	190	150	5	20
Wheeled Loaders	149,730	165,000	18,700	15,900	26,155	25,045	10,300	10,800	2,386	3,200
Total	**226,262**	**258,333**	**192,160**	**166,375**	**211,560**	**194,159**	**76,216**	**76,827**	**36,051**	**50,090**
	+25	**+14**	**-16**	**-14**	**+12**	**-8**	**+4**	**+1**	**+47**	**+39**

* Forecast

Source: Off-Highway Research

North America: Following massive advances in 2004 and 2005, the North American market cooled in 2006 and really went into serious decline in 2007. The decrease in 2007 was variable, since mining and public works are both in good shape. Products associated with private construction performed the worst, led by a big fall in telescopic handlers and above average declines in crawler excavators and backhoe loaders.

The forecast calls for further declines in 2008 and 2009, with the cyclical recovery not evident until 2010.

Western Europe: Strong growth was experienced across the board, in almost all countries and in almost all products, and regional sales saw a 12 per cent growth to a record level of 212,560 units. Demand was particularly strong for mini excavators, crawler excavators and telescopic handlers.

Japan: 2007 witnessed another year of the slow, steady climb of the construction equipment market out of the trough that had its lowest point in 2003. The motors were a slight improvement in public works volume, a larger improvement in the private investment climate and the willingness of rental companies to renew their fleets. A final significant factor was the ease of exporting used construction equipment, which is in great demand, now that south-east

Asia is booming once again. Some slowness occurred in house building because of a new law concerning earthquake proofing and demand was slowing again by the end of the calendar year.

India: For the first time this review gives an overview of this fast growing market. 2007 showed a remarkable increase of nearly 50 per cent in total sales, bringing them to nearly four times the level of 2003. In this market the backhoe loader is the king, taking six out of every ten sales. Growth in crawler excavators is also impressive and they now sell four times as many as in 2003. In the longer term backhoe loaders could rise to 50,000 units annually and crawler excavators to 40,000, if plans to build a new national infrastructure stay on track. A major market, indeed.

Production

The table below marks a historic milestone, the first year ever in which China is the world's largest producer of construction equipment. It has leaped from fourth to first place in a single year. The other three major regions, all at the same level in 2006, have suffered diverging fates in 2007.

Table 18. Production, by Type and Region, of Construction Equipment, 2007
(Units)

	China	Western Europe	Japan	North America
Articulated Dump Trucks	1	6,793	800	600
Asphalt Finishers	1,038	3,305	260	2,785
Backhoe Loaders	931	41,700	-	27,050
Crawler Dozers	7,596	2,020	8,250	11,775
Crawler Excavators	50,255	28,513	84,500	14,100
Crawler Loaders	10	1,555	250	-
Mini Excavators	20,615	53,575	94,030	10,000
Motor Graders	4,813	511	2,100	5,140
Motor Scrapers	2	25	-	650
Rigid Dump Trucks	719	475	900	2,975
RTLTs – Masted	-	3,985	-	3,400
RTLTs – Telescopic	50	32,302	-	16,300
Skid-Steer Loaders	2,432	4,355	2,650	71,800
Wheeled Excavators	1,127	14,004	1,900	445
Wheeled Loaders	164,790	37,598	16,900	18,590
Wheeled Loaders < 80 hp	8,410	16,565	6,450	290
Wheeled Loaders > 80 hp	156,380	21,033	10,540	18,300
Total	**254,378**	**230,716**	**212,630**	**185,610**

Source: Off-Highway Research

China: Production increased strongly for a second year. More than 250,000 units were produced in 2007, a massive increase of 30 per cent on the previous year. Domestic demand increased by 25 per cent in 2007, whilst exports grew by 50 per cent to 25,000 machines, led by a doubling of wheeled loader exports.

The astounding production of wheeled loaders increased by 24 per cent, a growth in units that is more than the whole European production for a single year. For the second year running, the number of crawler excavators produced increased by 45 per cent, while the growth of the mini excavator continues in China as elsewhere in the world. In 2007, more than 20,000 units were produced, an increase of a third over the previous year.

Europe: In 2007 production volumes reached an all time peak of 231,000 machines, an astonishing growth of 54 per cent in four years. The high level naturally reflects the substantial growth in regional demand during this period, but also underlines the importance of exports.

Japan: Production in 2007 rose to a six-year peak of 212,600 units on the back of a much improved export performance and a good first half in the home market. Great progress was registered in crawler excavators, while other products such as dump trucks and motor graders thrived on export orders. Others seemed to have passed a peak of output early in the year and are no longer growing – wheeled loaders and skid-steer loaders for example.

North America: From 2003 to 2006 output was growing but it has turned decisively downwards in 2007, with a general decline of nine per cent. It is interesting to note that of this total, 39 per cent was accounted for by skid-steer loaders, production of which fell by less than five per cent.

Keen not to accumulate inventory, manufacturers cut volumes most severely in articulated dump trucks (40 per cent) and by around 15 per cent in crawler dozers, crawler excavators, telescopic handlers and wheeled loaders. Conversely, mini excavators, motor graders and rigid dump trucks were untouched. North American production was only some 7,000 units lower than domestic demand, indicating that imports were struggling in view of the low dollar value.